

**Programming & Allocations Committee Handout  
Public Comment - Agenda Item 3a**

Roland Lebrun  
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June 6<sup>th</sup> 2016

MTC June 8<sup>th</sup> Programming and Allocations Committee  
Agenda Item 3a  
Peninsula Corridor Electrification Project (PCEP) MOU and Funding Plan

Dear Honorable Chair Wiener and Members of the Programming and Allocations Committee

Further to my letter of May 31 (appended below) I concur with MTC staff's concerns with the uncertainty of FTA Core Capacity and Cap and Trade funds but I also believe that it would be irresponsible to assume that the proposed allocation of \$87,230,000 in Prop1A bonds in FY16-17 (MTC resolution No. 4243 attachment D) is likely to survive the inevitable legal challenge (item 2.2 on page 3 of the May 31<sup>st</sup> letter).

MTC Resolution No. 4243 Attachment D

**REGIONAL MEASURE 2 PROGRAM  
Project Cash Flow Plan**

Project Title: Caltrain Electrification  
Sponsor: Caltrain  
RM2 Project Number: 40

RM2 Project No. 40	PRIOR	FY 2014-15	FY 2015-16	FY 2016-17	FUTURE	TOTAL
<b>RM2 Funds Total</b>	-	-	-	20,000,000	-	20,000,000
<b>PA/ED</b>	82,320,000	5,230,000		0	0	87,550,000
Prop 1B	8,000,000	5,230,000				13,230,000
JPB Members	58,640,000					58,640,000
FTA Formula	15,680,000					15,680,000
<b>Final Design (PS&amp;E)</b>	0	0	0	0	0	0
<b>Right of Way</b>	0	0	0	0	0	0
<b>Construction</b>	0	0	0	396,680,000	1,496,022,000	1,892,702,000
RM2				20,000,000		20,000,000
RM1				19,400,000		19,400,000
Prop 1A				87,230,000	512,770,000	600,000,000
FTA Core Capacity				172,000,000	475,000,000	647,000,000
Carl Moyer				4,000,000	16,000,000	20,000,000
JPB Members				52,170,000	91,362,000	143,532,000
FTA Formula				11,650,000	298,120,000	309,770,000
HSR/Non Prop 1A				30,230,000	82,770,000	113,000,000
TIRCP					20,000,000	20,000,000
<b>TOTAL FUNDING</b>						
Environmental	82,320,000	5,230,000	0	0	0	87,550,000
Final Design (PS&E)	0	0	0	0	0	0
Right of Way	0	0	0	0	0	0
Construction	0	0	0	396,680,000	1,496,022,000	1,892,702,000
<b>PROJECT TOTAL</b>	82,320,000	5,230,000		396,680,000	1,496,022,000	1,980,252,000

Issues highlighted in the May 31<sup>st</sup> letter to the VTA Governance & Audit Committee:

- The PCEP terminates at 4<sup>th</sup> & King instead of Transbay (Streets & Highways Codes Section 2704.04 (b) (2)).
- 79 MPH speed limit makes it impossible to achieve a travel time of 30 minutes or less between Diridon and Transbay (Streets & Highways Codes Section 2704.09 (b) (3)).
- The PCEP does not support 12 trains/hour (Streets & Highways Codes Section 2704.09 (c))

<http://www.leginfo.ca.gov/cgi-bin/displaycode?section=shc&group=02001-03000&file=2704.04-2704.095>

<http://www.thehamiltonreport.com/downloads/TOS-RULING-KENNY-3-4-2016.PDF> pp 14-15

Last but not least, **the staff memo does not give any consideration or recommendation with regards to the lack of justification for Caltrain's exorbitant electrifications costs or what if any capacity this \$2.2B project would add to the existing system.**

- \$22.5M electrifications costs/mile (5-10 times higher than Boston to New Haven)
- \$8.5M cost/vehicle (2-3 times higher than similar vehicles in Europe)

### Recommendation

MTC should seek guidance from an independent entity with a proven track record of delivering cost-effective commuter railway capacity enhancements.

Sincerely,

Roland Lebrun

PS. The first paragraph on page 3 is incorrect. The correct amount for the FTA funds committed by MTC for the EMUs in the original Nine-Party MOU funding plan is \$440M, not \$315M.

CC:

VTA Board of Directors  
SFCTA Board of Directors  
Caltrain Board of Directors  
TJPA Board of Directors  
High Speed Rail Authority Board of Directors  
SFCTA CAC  
Caltrain CAC  
Caltrain BPAC  
TJPA CAC

Roland Lebrun  
[ccss@msn.com](mailto:ccss@msn.com)  
May 31<sup>st</sup> 2016

VTA June 2<sup>nd</sup> Governance and Audit Committee Meeting  
Agenda item 5 Caltrain PCEP 7-party MOU

Dear Honorable Chair Chavez and members of the VTA Board of Directors,

The intent of this letter is to alert the VTA & SFCTA Boards and the Metropolitan Transportation Commission to potential budget and funding issues with the Peninsula Corridor Electrification Program (PCPEP) as well as significant conflicts with major capital projects including BART and High Speed Rail.

## 1 Budget Issues

The PCEP consists of three components:

### Budget was revised in 2016

- ▶ **New Budget of \$2.221 billion**
  - Results of 2014 cost estimate study
  - Bids received for both Electrification and Vehicles contracts

Early Investment Program Costs (in \$ millions)	2012 MOU	2016 MOU
CBOSS/Positive Train Control	\$231	\$231
Electrification	\$785	\$1,253
Vehicles - Electric Multiple Units	\$440	\$727
<b>TOTAL</b>	<b>\$1,456</b>	<b>\$2,211</b>



# Programming & Allocations Committee Handout Public Comment - Agenda Item 3a

## 1.1 Communications-Based Overlay Signaling System (CBOSS) \$231M.

Caltrain’s latest Quarterly Capital Project Report shows that this system is currently:

- **\$14.3M over budget** (as of March 31 2016)
- **Over 3 years behind schedule** (FRA safety certification rescheduled from September 2015 to December 2018)

[http://www.caltrain.com/Assets/ Finance/Quarterly+Capital+Program+Status+Report/JPB/FY16+Q3+JPB+Quarterly+Report.pdf](http://www.caltrain.com/Assets/Finance/Quarterly+Capital+Program+Status+Report/JPB/FY16+Q3+JPB+Quarterly+Report.pdf) pages 10-11

## 1.2 Electrification of 51 route miles \$1,253M (**\$24.5M/route mile**)

**It is unclear why electrifying Caltrain between San Jose and San Francisco should cost 5-10 times as much as electrification between Boston and New Haven:**

*“Cost to design and install high speed rail electrification system from Boston, MA to New Haven, CT (primarily two track mainline railroad) was approximately **\$2 million per mile** (contract cost) but nearly **\$4 million per mile** (according to the federal auditor’s review)”*  
<http://www.reconnectingamerica.org/assets/Uploads/bestpractice101.pdf> (page 4: average costs).

## 1.3 Procurement of 96 vehicles – Electric Multiple Units (EMUs) \$821.1M (**\$8.5M/vehicle**)

There is a \$94.1M discrepancy between the May 25 presentation to the SFCTA CAC and the FY17 Capital Budget which will be presented to the Caltrain Board on June 2<sup>nd</sup>.

- The cost of electrification dropped by \$93.5M (\$1,253M - \$1,159.5M)
- **The cost of the 96 EMUs increased by \$94.1M (\$821.1M - \$727M)**

ii. CALTRAIN MODERNIZATION						
18	Electrification	12 - 13	Raja Viswanathan	1,159,500,000	99,142,587	139,512,533
19	EMU Procurement	12 - 15	Raja Viswanathan	821,100,000	44,828,000	67,684,548
				207,197,081		

- **The average cost of Caltrain EMU railcars is nearly triple that of recent contract awards (\$3.0M/railcar vs. \$8.5M for Caltrain).**

Client	Manufacturer/Model	Year	Contract (\$M)	#units	Unit cost	
SNCF Lux	Stadler KISS	2010	\$84	24	3.49	<a href="http://www.railway-t">http://www.railway-t</a>
Deutsche Bahn	Bombardier Twindexx	2011	\$483	137	3.53	<a href="http://www.railway-t">http://www.railway-t</a>
Deutsche Bahn	Bombardier Twindexx	2012	\$210	64	3.28	<a href="http://www.railway-t">http://www.railway-t</a>
STIF & SNCF	Bombardier Omneo	2015	\$442	168	2.63	<a href="http://www.railway-technol">http://www.railway-technol</a>
AeroExpress	Stadler KISS	2016	\$205	62	3.31	<a href="http://www.railway-technol">http://www.railway-technol</a>
SNCF	Bombardier Omneo	2016	\$38	16	2.38	<a href="http://www.railway-technology.co">http://www.railway-technology.co</a>
<b>Caltrain</b>	<b>???</b>	<b>2016</b>	<b>\$821</b>	<b>96</b>	<b>8.55</b>	

## 2 Funding Issues

Supplemental MOU Funding Plan		
Program Funding by Source <i>(in \$ millions)</i>	2012 MOU	2016 MOU
PCJPB Member Agency Contributions	\$180	\$240.0
JPB Local (San Mateo County Transportation Authority)	\$11.0	\$20.0
Caltrain PTC	\$4.0	\$4.0
<i>Subtotal Local</i>	<i>\$195.0</i>	<i>\$264.0</i>
Prop 1A Connectivity	\$106.0	\$106.0
Prop 1A High Speed Rail Authority	\$600.0	\$600.0
CHSRA Cap & Trade/Other		\$113.0
Cap & Trade TIRCP		\$20.0
Prop 1B Caltrain	\$24.0	\$24.0
<i>Subtotal State</i>	<i>\$730.0</i>	<i>\$863.0</i>
Federal Rail Administration (FRA)	\$17.0	\$17.0
FTA/FHWA prior/current obligations	\$45.8	\$45.8
FTA future obligations	\$440.0	\$315.0
FTA Core Capacity		\$647.0
<i>Subtotal Federal</i>	<i>\$502.8</i>	<i>\$1,024.8</i>
MTC Bridge Tolls	\$11.0	\$39.4
BAAQMD Carl Moyer*	\$20.0	\$20.0
<i>Subtotal Regional</i>	<i>\$31.0</i>	<i>\$59.4</i>
<b>TOTAL</b>	<b>\$1,458.8</b>	<b>\$2,211.2</b>



### 2.1 PCJPB Member Agency Contributions \$240M

These contributions can be eliminated by bringing electrification and EMU procurement in line with more realistic cost estimates (total savings in excess of \$1B)

### 2.2 Prop 1A High Speed Rail Authority \$600M

#### The PCEP as envisaged by Caltrain does not qualify for Prop 1A Bonds

- The PCEP terminates at 4<sup>th</sup> & King instead of Transbay (Streets & Highways Codes Section 2704.04 (b) (2)).
- 79 MPH speed limit makes it impossible to achieve a travel time of 30 minutes or less between Diridon and Transbay (Streets & Highways Codes Section 2704.09 (b) (3)).
- The PCEP does not support 12 trains/hour (Streets & Highways Codes Section 2704.09 (c)) (<http://www.leginfo.ca.gov/cgi-bin/displaycode?section=shc&group=02001-03000&file=2704.04-2704.095>).

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## 2.3 CHSRA Cap & Trade/Other \$113M

Risk: Cap & Trade revenues are “uncertain” at best and could be declared illegal by the Courts.

## 2.4 FTA Future obligations \$440M

**This is currently the only guaranteed source of funding for the EMUs.** SamTrans plans to “borrow” \$125M of this funding on the assumption that they can “make good” if/when they succeed in securing a \$647M FTA Core Capacity grant in the fall.

**Q1: What is the backup plan if the grant does not come through?**

**Q2: Why is Caltrain “borrowing” \$125M for SOGR when there is less than \$25M SOGR in the FY17 Capital Budget?**

i. SOGR						
<b>Right of Way / Signal &amp; Communications</b>						
1	Grade Crossing SOGR - Design - FY17	13	Robert Tam	380,000	0	76,000
2	Grade Crossing SOGR - Phase II - FY16	13, 16	Robert Tam	2,499,000	360,000	669,466
3	Los Gatos Creek Bridge Replacement	14, 15, 16	Parand Maleki	33,847,800	23,302,000	7,295,800
4	Marin St. Bridge Rehabilitation and Napoleon St. Bridge Replacement	13 - 16	Bin Zhang	3,000,000	1,364,000	1,000,000
5	Track SOGR - FY17	16	Pedro Gutierrez	9,663,000	0	3,000,000
6	PA Upgrades	13 - 16	Robert Tam	1,073,000	0	488,000
7	Railroad Communication System SOGR - FY17	13	Uhila Makoni	1,075,000	0	442,000
8	Signal Rehab - FY17	16	Hubert Chan	1,210,000	0	900,000
						<b>13,871,266</b>
<b>Rolling Stock</b>						
9	F-40 Mid Life Overhaul	16	David Bennett	6,300,000	4,000,000	2,300,000
10	Bombardier Technical Spec. Mid Life Overhaul	11	David Bennett	183,642	0	183,642
11	Gallery Spec Mid Life Overhaul	12	David Bennett	183,642	0	183,642
12	F-40 SEP-HEP Replacement - FY17	16	David Bennett	2,745,000	223,865	2,130,000
13	F-40 Locomotive SOGR project - FY17	16	David Bennett	1,254,199	0	1,254,199
14	Main Engine Rebuild (F40 Inframe Overhaul)	16	David Bennett	1,350,000	0	945,592
						<b>6,997,075</b>
<b>Station &amp; Intermodal Access</b>						
15	Station Enhancements and Renovations	13 - 19	Rob Scorpino	780,000	0	600,000
16	Sunnyvale Station Platform Rehabilitation	16	Rob Scorpino	1,300,000	650,000	550,000
17	Systemwide SOGR Stations - FY17	13 - 19	Rob Scorpino	950,000	0	300,000
						<b>1,450,000</b>

### 3 Conflicts with major Capital Projects

It is unclear how Caltrain proposes to operate an electrified system during construction of the following projects:

- Caltrain Downtown Extension (DTX) to Transbay
- Reconstruction of Diridon station throats and platforms, including BART interface
- South San Francisco station expansion (4 tracks)
- Bayshore station relocation (6 tracks)
- Hillsdale station expansion (4 tracks)
- High Speed Rail track realignments (smoother curves, 80 MPH turnouts)
- High Speed Rail capacity improvements (passing tracks)

### Recommendation

Delay Caltrain electrification until all capital projects affecting the right of way have been completed

Sincerely,

Roland Lebrun

CC

VTA Board of Directors

SFCTA Board of Directors

MTC Commissioners

Caltrain Board of Directors

TJPA Board of Directors

High Speed Rail Authority Board of Directors

SFCTA CAC

Caltrain CAC

Caltrain BPAC

TJPA CAC